



SEVIO

User Guide to Step 7[®] - Siemens[®]



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Version History

Revision	Date	Description
16_09	01/09/2016	Emission
17_05	01/05/2017	First Revision
21_12	01/12/2021	Second Revision

Trademarks

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Preface

The Sevio system has been designed to offer Clients a solution for the connection of multiple independent and physically dislocated networks, transforming them into numerous Sevio networks. Each Client is the owner of a Realm which is the set of all Sevio networks and Workstations (PC, tablet, smartphone).

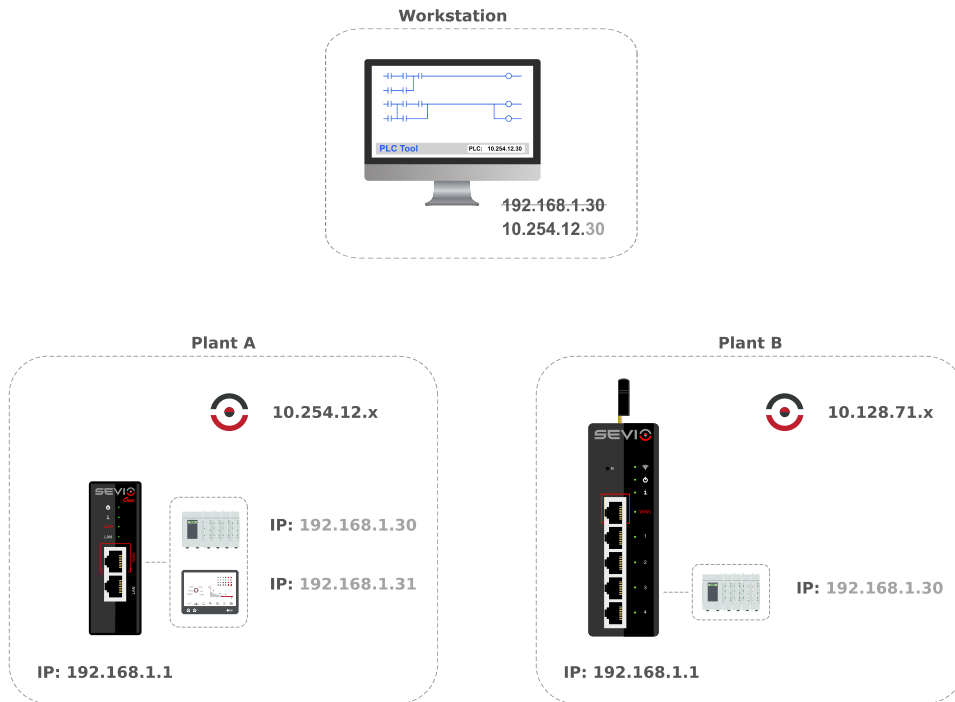
This document explains how to use the Sevio system combined with **Siemens®** on **Step 7®** platform.

Requirements

The fundamental requirements for use of the Sevio system combined with **Siemens®** products:

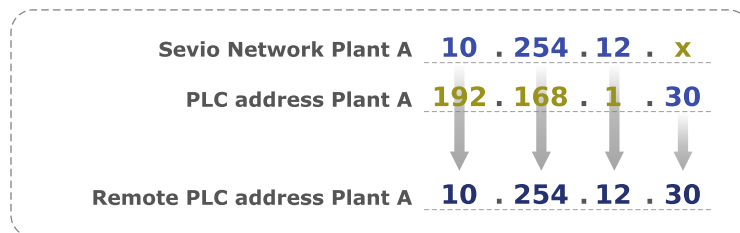
- the Sevio Router;
- the Registration Sheet (supplied along with the Sevio Router);
- a Siemens® PLC/HMI with Ethernet connectivity;
- a PC with an up-to-date web browser and Step 7® application installed;
- a VPN Client configured and connected (see [Workstations Configuration](#));
- an Internet access.

Using Sevio System



Each Sevio Router provides a specific Sevio network. In the above example, Plant A Sevio network is 10.254.12.x, while the Plant B Sevio network is 10.128.71.x.

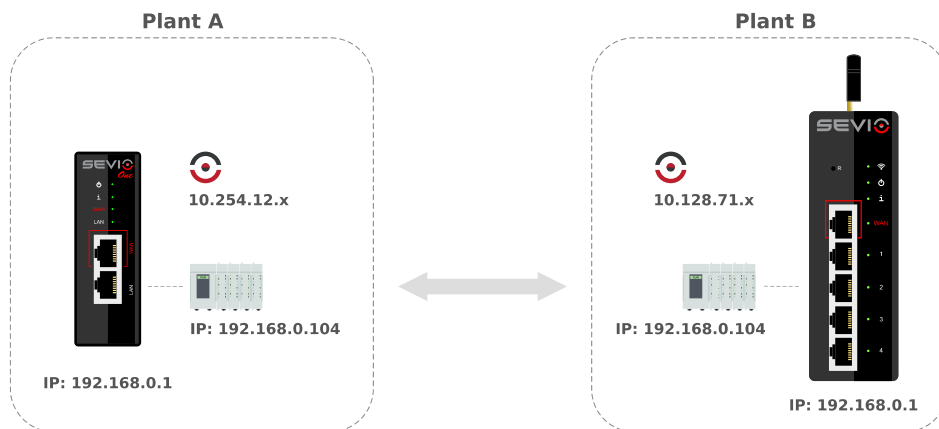
To access Plant A PLC from the Workstation, the Operator should combine first three bytes of Sevio Network with fourth byte assigned to PLC device:



Sevio and Siemens

The Sevio system allows Workstations to communicate with all devices connected to the various Sevio Routers.

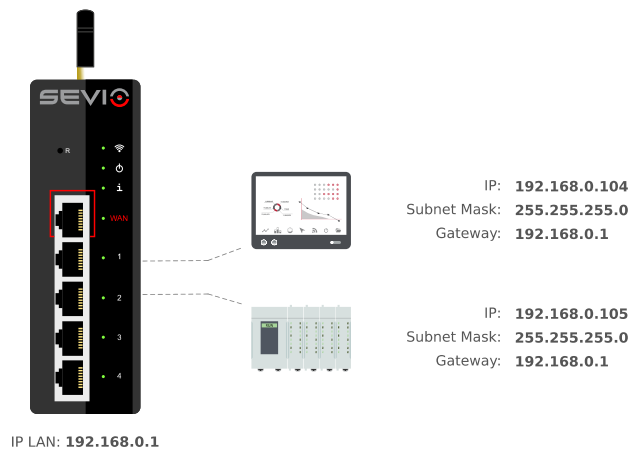
One of the most distinctive features of Sevio System is the routing capability, eg. allowing communication between devices of different Sevio networks/plants, part of the same Realm.



In order to be able to use this feature, it is necessary that all automation devices are configured with IP address and gateway address (LAN address of the Sevio Router to which they are connected). Firewalls on all Sevio Routers must be enabled.

Remote connection will be allowed using Sevio Networks on each site.

Note: Sevio Routers must have the same firmware installed.

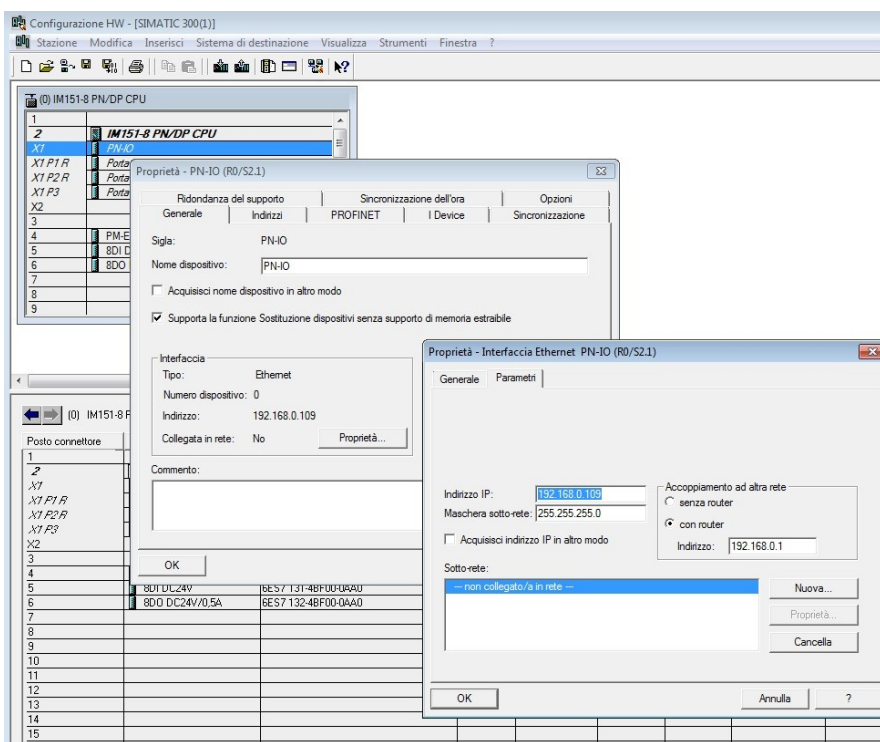


Preliminary configuration

The procedure below describes the preliminary configuration of devices that need to be accessible remotely.

A Sevio Router is sometimes installed in existing systems by personnel that is not qualified to modify the software configuration. Using the Masquerade mode (see chapter Sevio Router Parameters in [User Guide](#)) it is possible to access devices remotely omitting the procedure below.

Note: that enabling masquerade mode prevents the PLC device from originating connections to the Sevio Network.

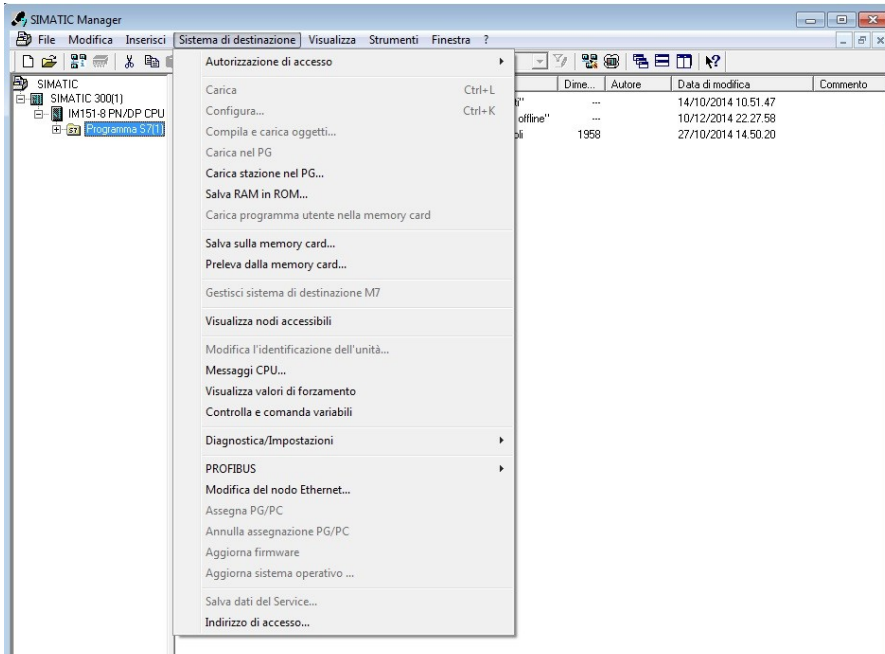


Go to **Device configuration, Properties** and set project IP address, e.g. **192.168.0.109**

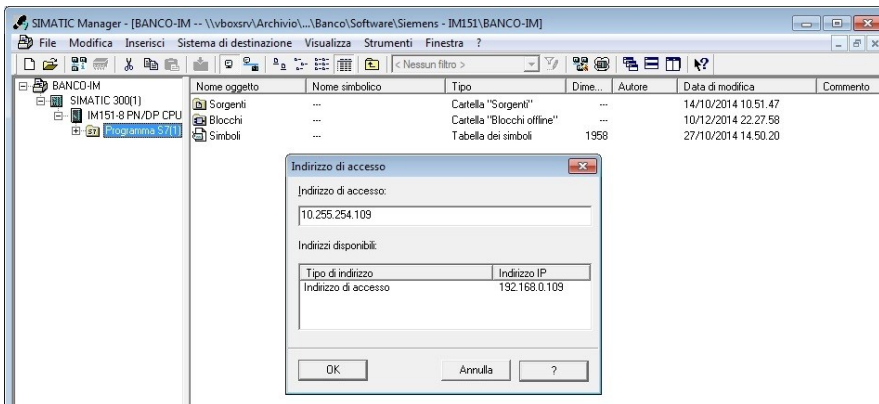
Select **use router** and set up the Sevio Router LAN IP address assigned (see chapter Sevio Router Parameters in [User Guide](#)), e.g. **192.168.0.1**.

Proceed with download of hardware configuration, through local connection.

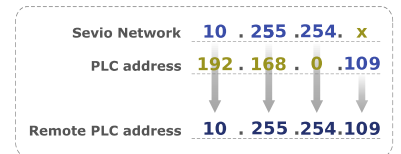
PLC remote access



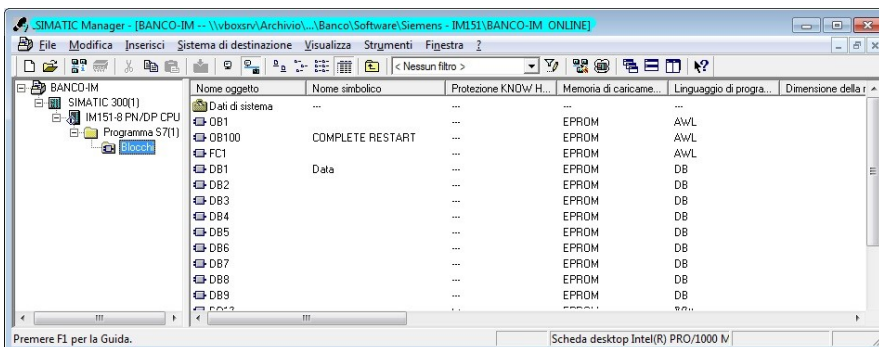
Select **Program S7** directory, **Destination system**, then **Access address...**



Set up the remote PLC IP address:



Then press **OK** to confirm.



From this moment on, it is possible to perform all online activities.

The same connection conditions will be used at the next start-up.



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